

24 MILE ROAD BRIDGE

HAER No. MI-83

24 Mile Road over the North Branch of the
Clinton River, approximately 450 feet west
of North Avenue
Chesterfield vicinity
Macomb County
Michigan

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD

National Park Service

Northeast Region

Philadelphia Support Office

U.S. Custom House

200 Chestnut Street

Philadelphia, P.A. 19106

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HISTORIC AMERICAN ENGINEERING RECORD

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Location: 24 Mile Road over the North Branch of the Clinton River, approximately 450 feet west of North Avenue, Chesterfield Vicinity, Macomb County, Michigan

UTM: 17.346000.4727720
Quad: Waldenburg, MI, 1:24,000

Date of Construction: 1909

Builder: Illinois Bridge Company, Chicago, IL

Present Owner: Board of County Road Commissioners of Macomb County, Administration Building, 156 Malow Street, Mount Clemens, Michigan 48046

Present Use: Not in service

Significance: This is an excellent example of a mid-sized bridge built by a small rural township to serve the transportation needs of its farmers, enabling them to move their products to market. This is one of more than a dozen reinforced concrete bridges built in Macomb County, Michigan, by the Illinois Bridge Company of Chicago. This firm erected scores of concrete bridges in Michigan in the early twentieth century.

Project Information: This documentation is the result of a Memorandum of Agreement between the Macomb County Road Commission, the State Historic Preservation Office, and the Advisory Council on Historic Preservation as a mitigative measure prior to the demolition of the bridge. It was completed in 1995 by Dr. Charles K. Hyde, Wayne State University, Detroit, MI 48202

HISTORY

Macomb County, located northeast of Detroit, was surveyed in 1817 and first settled by whites beginning in the early 1820s. Permanent settlements in Macomb Township date from 1831 and the township government was established in 1834. Settlers had purchased all government lands by 1837, when Macomb Township had 736 residents. By 1880, the township had a population of 2,056 and an economic base that was primarily agricultural. The lands near the intersection of North Avenue and French Road (later 24 Mile Road) were settled in the 1830s by several members of the Stroup family, including George (1777-1858) and two of his sons, Jacob and George. Jacob Stroup (1811-1884) served multiple terms as Supervisor and Clerk of Macomb Township in the 1860s and 1870s. Local residents have called this area "the Stroup Settlement" or "Stroup's Corners" over the years.¹

There is no clear evidence of a bridge carrying 24 Mile Road over the North Branch of the Clinton River in atlases and maps published in 1859, 1875, and 1895. Wagon and buggy traffic probably simply forded the river there or at some convenient location nearby. This bridge was part of a broad effort begun by Macomb Township in 1905 to improve highways and bridges within its borders. Township records show more than a dozen bridges built between 1905 and 1915. The construction program probably reflected the increased importance of the automobile, truck, and tractor to the family and working lives of the township's residents.²

The Illinois Bridge Company of Chicago built this bridge in 1909 for Macomb Township for a total cost of \$4,441. This bridge company, founded in 1901 in Chicago, became a significant builder of reinforced concrete bridges in the midwest in the early twentieth century. Their 1914 booklet, Bridges of Concrete and What They Cost, featured photographs of twenty-one reinforced concrete arch bridges, including this structure. Seven of the bridges featured, one-third of the total, were built in the southern part of Michigan.³

HISTORY (Continued)

The Illinois Bridge Company built its first bridge for Macomb Township in 1908. In May of that year, the township commissioners received five proposals for an iron bridge to carry 24 Mile Road over the Middle Branch of the Clinton River. The bids ranged from \$2,338 to \$2,500, but the commissioners rejected all of them. Later that month, they awarded a contract to the Illinois Bridge Company for a concrete bridge at that site, to be built for \$2,370. In mid-July, 1908, Macomb Township paid the Illinois Bridge Company exactly \$2,370 for completing the work.⁴

Macomb Township officials apparently decided to make the Illinois Bridge Company their regular contractor for bridge projects. There is no evidence of subsequent competitive bidding for bridges built by the township. The records contain no direct reference to Macomb Township awarding the contract for this bridge, which carries 24 Mile Road over the North Branch of the Clinton River. Illinois Bridge Company's 1914 brochure featured this two-span concrete arch bridge and indicated that it cost Macomb Township \$4,441. Township records show payments of \$4,338 to Illinois Bridge in June and July, 1909. The surviving records also contain no reference to the township's acceptance of the finished bridge. Macomb Township later awarded contracts for eight more bridges to the Illinois Bridge Company in 1912-1916, all without competitive bidding.⁵

The minutes of township commissioners' meetings held in 1912 to consider building the 24 Mile Road Overflow Bridge (See HAER No. MI-84) refer to the 1909 structure as "the Stroup Bridge" or "Stroup's Bridge," probably referring to Roy Stroup, who owned a large farm at the southeast corner of the intersection of 24 Mile Road and North Avenue. It is not likely that either name ever came into common usage, since no later use of either name can be found.⁶

The 24 Mile Road Bridge came under the jurisdiction of the Macomb County Road Commission sometime in the 1920s, but none of the surviving records indicate precisely when this occurred. The bridge remained in service until October, 1991, when the Road Commission permanently closed it because of severe deterioration of the deck and railings.⁷

DESCRIPTION

The 24 Mile Road Bridge is an earth-filled reinforced concrete arch bridge, consisting of two arch spans, a single reinforced concrete pier, and reinforced concrete abutments. It measures 130 feet long overall, 18 feet wide, and provides a clear roadway of 16 feet.

The concrete railings, measuring 2 feet 6 inches high and 6 inches thick, are badly spalled and crumbling over most of the length of the bridge. In addition, the original deck is covered with 6 or 8 inches of soil, reducing the railings to less than 2 feet in height in some places.

The two spans are set apart by 8-inch square pilasters extending from the top of the pier (the spring line) to the top of the railing, creating separate railings for each span. To break up the monotony of the long railing and to provide some decorative detail, each railing has nine long, narrow rectangular panels, each 5 feet 4 inches long, 10 inches high, centered vertically within the railing. These panels are set off from the surrounding concrete by a 2 inch wide bevelled edge. The identical design is found on the inside and outside faces of the railings.

NOTES

¹Robert F. Eldredge, Past and Present of Macomb County (Chicago: S.J. Clarke, 1905), pp. 654-656 and History of Macomb County, Michigan (Chicago: M. A. Leeson & Company, 1882), pp. 471-, 767-770, 775-776.

²Commonwealth Cultural Resources Group, Inc., "Cultural Resources Survey for the Twenty-Four Mile Road Bridge and Overflow Bridge Over the North Branch of the Clinton River Replacement Project," (Jackson, Michigan: 1994), p. 19.

³Victor C. Darnell, Directory of American Bridge-Building Companies, 1840-1900 (Washington, D.C.: Society For Industrial Archeology, 1984), p. 11 and Illinois Bridge Company, Bridges of Concrete and What They Cost (Chicago: Illinois Bridge Company, 1914), no pagination.

⁴Macomb Township, Minutes of Commissioners' Meetings, 1865-1908, Meetings of 11 May 1908 and 19 May 1908; Macomb Township, Treasurer's Record Book, 1902-1909, payments of \$800.00 and \$1,570 to the Illinois Bridge Company, 13 July 1908.

⁵Illinois Bridge Company, Bridges of Concrete and What They Cost (1914), no pagination; Macomb Township, Clerk's Account Book, 1909-1913, payments of \$1,725 (25 June 1909) and \$2,613 (22 July 1909) to the Illinois Bridge Company; and Macomb Township, Record of Commissioners' Meetings, 1901-1951.

⁶Macomb Township, Record of Commissioners' Meetings, 1901-1951, meetings of 18 April, 2 May, and 7 September 1912.

⁷Macomb County Road Commission, Traffic Control Order, 15 October 1991.

SOURCES OF INFORMATION

A. Engineering Drawings: A thorough search of the records of Macomb Township and the Macomb County Road Commission has uncovered no surviving drawings.

B. Historic Views: None have been found.

C. Bibliography

1. Primary and Unpublished Sources:

Macomb County Board of County Supervisors, Supervisors' Records, March 1912 - December 1923. These include the first ten annual reports issued by the Macomb County Board of County Road Commissioners, October 1912 - October 1921. The records are in storage at the Macomb County Service Center, 21855 Dunham Road, Mt. Clemens, Michigan 48046.

Macomb County Board of County Road Commissioners, Minute Records, May 1912 - May 1948. Held in the Administration Building of the Board of County Road Commissioners of Macomb County, 156 Mallow Street, Mount Clemens, Michigan 48046.

Macomb Township, Clerk's Account Book, 1909-1913. Macomb Township Office, 19925 Twenty-Three Mile Road, Macomb, Michigan 48042.

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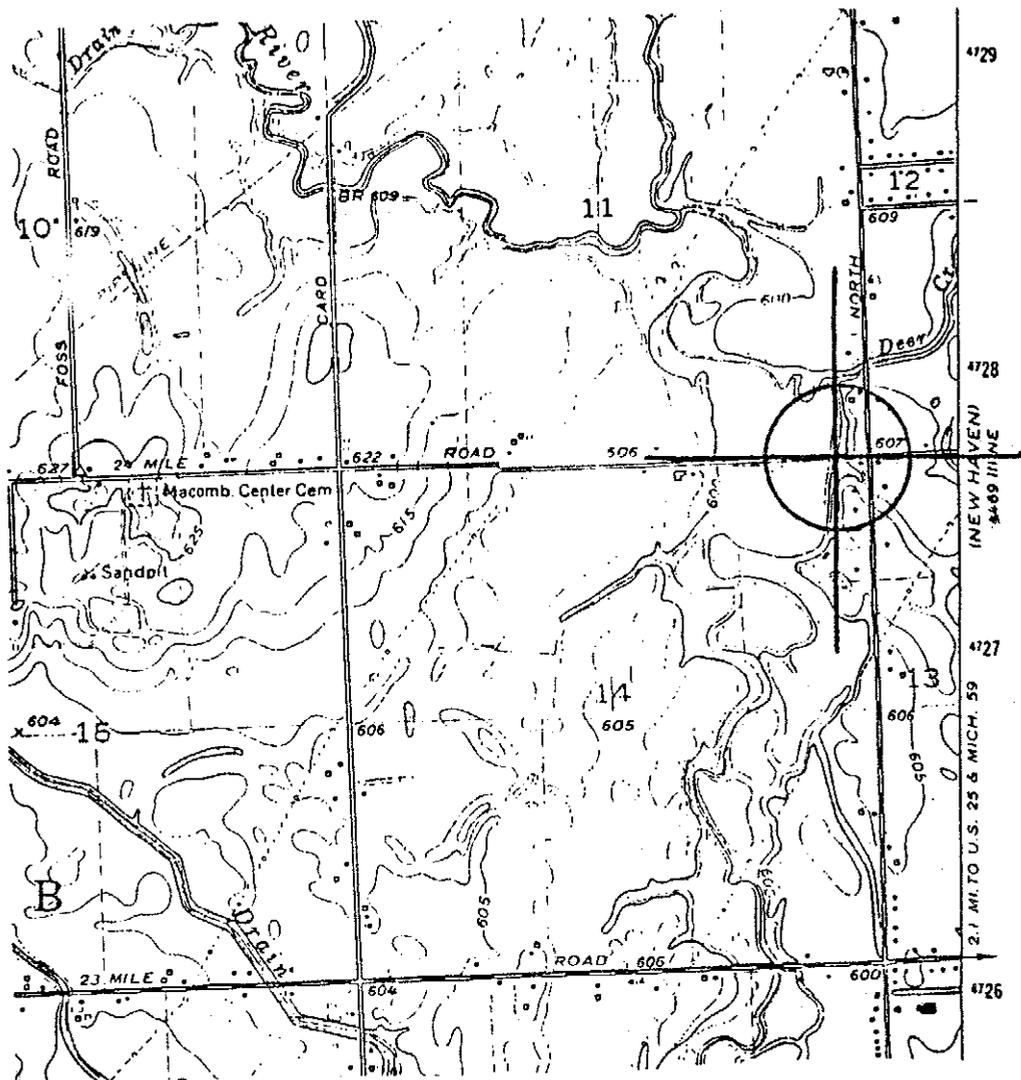
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24 MILE ROAD BRIDGE
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WALDENBURG, MICHIGAN QUADRANGLE, 1:24,000

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GENERAL SITE PLAN

